Sanitized Copy Approved for Release 2011/09/23 : CIA-RDP80-00809A000700050386-7

50X1-HUM

CLASSIFICATION S-E-C-R-E-T
SECURITY INFORMATION
CENTRAL INTELLIGENCE AGENCY

INFORMATION FROM
FOREIGN DOCUMENTS OR RADIO BROADCASTS

REPORT

CD NO.

COUNTRY	USSR
SUBJECT	Economic; Technological; Scientific - Medical, optical, measuring instruments
HOW PUBLISHED	Daily newspapers; monthly periodicals
WHERE PUBLISHED	USSR
DATE PUBLISHED	2 Mar - 20 Oct 1951
LANGUAGE	Russian

DATE OF INFORMATION 1951

DATE DIST. 29 Mar 1952

NO. OF PAGES 3

SUPPLEMENT TO REPORT NO.

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES WITHIN THE MEANING OF ESPIONAGE ACT 50 U. S. C., 31 AND 32, AS AMENDED. ITS TRANSMISSION OR THE REVELATION OF ITS CONTENTS IN ANY MANNER TO AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW. REPRODUCTION OF THIS FORM IS PROHIBITED.

THIS IS UNEVALUATED INFORMATION

SOURCE Newspapers and periodicals as indicated.

NEW SOVIET DEVICE TAKES LOCALIZED X-RAYS; ELECTRONIC MICROSCOPES GO INTO SERIES PRODUCTION

TOMOFLUOROGRAPH FACILITATES EXAMINATION OF INTERNAL ORGANS -- Tbilisi, Zarya Vostoka, 23 Mar 51

One of the principal shortcomings of existing X-ray pictures is that internal organs are often obscured by surrounding parts of the body. This obstacle to accurate diagnosis has been overcome by the tomofluorograph, a new device which obtains pictures of individual layers of internal organs, free from the obscuring shadows of intervening layers.

The tomofluorograph was developed under the direction of M. S. Ovoshchnikov, of the Kiev Institute of Roentgenology, Radiology, and Oncology. He was assisted by V. N. Ivanov, Corresponding Member of the Academy of Medicine USSR, and A. I. Prokof'yev, of the Central Design Bureau, Main Administration of the Medical Industry. All three men won Stalin prizes for their achievement.

The device is mounted between two metal columns which are secured to a single base. The essential units are the X-ray tube and the fluorographic tube, which is opposite the X-ray tube. A translucent screen is attached to the top end of the fluorographic tube, and an FED camera at its base. The camera uses moving-picture film. In order to examine the thorax by layers, for example, eight to ten frames must be taken. The process takes 15-20 minutes.

The Technical Council of the Ministry of Health established series production of the new device. Last year, the Kiev Rentok Plant put out 46 tomofluorographs, and plans to put out 65 more this year.

Tomofluorographs are being used in clinics in Moscow, Kiev, Minsk, Tbilisi, Sverdlovsk, L'vov, Simferopol', and other cities.

CLASSIFICATION S-E-C-R-E-T

STATE	X	NAVY	X	NSRB		DISTRIBUTION					
ARMY	X	AIR	X	FBI							

Sanitized Copy Approved for Release 2011/09/23 : CIA-RDP80-00809A000700050386-7

Sanitized Copy Approved for Release 2011/09/23 : CIA-RDP80-00809A000700050386-7

50X1-HUM

Moscow, Znaniye-Sila, Jun 51

In taking photographs with the Ovoshchnikov tomofluorograph, the organ under scrutiny is made the axis about which the X-ray tube and screen of the fluorographic tube are rotated. Thus, only the centered part of the body is in focus, the intervening parts being blurred out.

Use of the FED camera to photograph the images on the fluorographic screen instead of the usual complicated photographic apparatus cuts film consumption 200 times.

Ashkhabad, Turkmenskaya Iskra, 25 Apr 51

One of the first Ovoshchnikov tomofluorographs, built at the Kiev Rentok Plant, will be installed in the Republic Tuberculosis Dispensary at Ashkhabad.

BUILD VARIOUS MODELS OF MICROSCOPE -- Moscow, Nauka i Zhizn', Apr 51

In 1946, A. A. Lebedev, V. N. Vertsner, and I. G. Zandin were awarded Stalin Prizes for putting out the first Soviet magnetic electronic microscope with a 50,000-volt capacity.

Successive years have brought greater Soviet achievements in this field of electronics. A so-called universal magnetic electronic microscope, of 100,000-volt capacity, was built, with which objects could be examined directly, by reflection and by emission. Small-scale electronic microscopes of the electromagnetic and electrostatic type have been turned out, as well as microscopes with permanent magnet "lenses."

Series production of Soviet electronic microscopes is now established.

/Photographs showing the following Soviet models have not been reproduced, but are available in the original in CIA: electrostatic electronic, 50,000 volts (1); magnetic electronic, 50,000 volts (2); magnetic, small scale (3); universal magnetic electronic, 100,000 volts (4). Bacteria and viruses, magnified 20,000 times, are shown on the same page. [redacted] for earlier description of electronic microscope./

50X1-HUM

MEDICAL INSTRUMENTS PLANT LACKS TOOLS, MATERIALS -- Tallin, Sovetskaya Estoniya, 2 Mar 51

The situation at the Tartu Medical Instruments Plant is extremely critical. A new item scheduled for production by the first quarter of this year has not yet made its appearance, and nobody knows when it will. Experimental models of the item, which should have been completed long ago, are not yet in existence. To make way for the new production, the working area should have been enlarged, additional equipment set up, and new technological processes developed. None of this was done. There are neither tools nor materials for the new production.

Tambaum, chief of the Main Administration of the Metals Industry of the Ministry of Local and Shale-Chemical Industry, Estonian SSR, has been apprised of the situation by the plant directors, both by telephone and official documents. The main administration, however, is not giving the plant any of the help it requires to organize its new production.

Sanitized Copy Approved for Release 2011/09/23 : CIA-RDP80-00809A000700050386-7

Sanitized Copy Approved for Release 2011/09/23 : CIA-RDP80-00809A000700050386-7

50X1-HUM

OFFER EQUIPMENT IN UNLIMITED QUANTITY -- Frunze, Sovetskaya Kirgiziya, 25 Mar 51

The Special Store of the Kirgiz Main Pharmaceutical Administration, Frunze, has the following items available for doctors and hospitals: general surgical instruments, neurosurgical equipment, diagnostic equipment, ophthalmological equipment, obstetrical and gynecological equipment, urological laboratory equipment, reagents, and dental instruments, including prosthetic equipment. These items are available in unlimited quantity to medical institutions, institutions of preventive medicine, veterinary institutions, scientific research institutes, and other establishments.

BUILD NEW PACKING MACHINE -- Moscow, Izvestiya, 22 Apr 51

The Zhdanov Medical Equipment Plant has built a new medicine-packing machine which replaces 180 workers. It has performed well on tests.

PURSUE OUTSIDE STUDY BEFORE STARTING NEW PRODUCTION -- Tallin, Sovetskaya Estoniya, 20 Oct 51

The Tallin KIP (Checking and Measuring Instruments) Plant is constantly increasing its range of products and improving its production capacity. The laboratory is now fully equipped, and all shops are illuminated by daylight lamps. The assembly systems have been improved.

In May it was decided to launch the production of water meters and batching meters. A group was sent to Leningrad to study these instruments, and others were sent to the Punane RET Plant and the Vol'ta Plant, where the electrical aspects of production were studied. The KIP Plant then had to build special equipment; 20 dies, 16 special attachments, and three jigs have been completed so far.

An experimental model of the water meter has been built, and has worked well on tests. The plant has received an order from the Kuybyshev GES project for some of each of the two new instruments, to be delivered in the fourth quarter of 1951.

*

- E N D -

Sanitized Copy Approved for Release 2011/09/23 : CIA-RDP80-00809A000700050386-7